What is claimed is:

1. A semiconductor device comprising:

a semiconductor substrate having an integrated circuit and an electrode that is connected electrically to the integrated circuit;

a resin layer formed on a surface of the semiconductor substrate on which the electrode is formed, avoiding the electrode; and

a wiring layer which is electrically connected to the electrode and has a land formed on the resin layer,

wherein a penetrating hole that exposes the resin layer is formed in the land.

2. The semiconductor device as defined in claim 1,

wherein the shape of the land in plan view is substantially circular.

3. The semiconductor device as defined in claim 1,

wherein the penetrating hole is an elongated hole.

4. The semiconductor device as defined in claim 1,

wherein the penetrating hole is an elongated hole extending along the outer edge portion of the land.

5. The semiconductor device as defined in claim 1,

wherein a plurality of the penetrating holes are formed in the land.

6. The semiconductor device as defined in claim 5,

wherein the penetrating holes are arranged along the outer edge portion of the land.

7. The semiconductor device as defined in claim 5,

wherein the penetrating holes are disposed with substantially equal distances between adjacent holes.

8. The semiconductor device as defined in claim 1,

wherein the land is formed on an upper surface of the resin layer.

9. The semiconductor device as defined in claim 1, wherein:

a plurality of the resin layers are formed at different positions in plan view on the semiconductor substrate; and

the land is formed integrally with an upper surface and a side surface of one of the resin layers.

10. The semiconductor device as defined in claim 9,

wherein the penetrating hole is formed in a portion of the land covering the side surface of the resin layer.

11. The semiconductor device as defined in claim 9,

wherein the side surface of the resin layer is tapered.

12. The semiconductor device as defined in claim 9,

wherein the resin layer substantially has a shape of conical frustum.

13. The semiconductor device as defined in claim 1, further comprising:

a resist layer which is formed on a surface of the semiconductor substrate on which the electrode is formed, and has an aperture that causes at least part of the land to be exposed.

14. The semiconductor device as defined in claim 13,

wherein the shape of the aperture of the resist layer in plan view is substantially circular.

15. The semiconductor device as defined in claim 13,

wherein the resist layer fills at least part of the penetrating hole.

16. The semiconductor device as defined in claim 13, wherein:

the resist layer is formed to fill the penetrating hole; and

part of an edge of the penetrating hole is substantially in contact with an edge of the aperture of the resist layer.

17. The semiconductor device as defined in claim 1, further comprising:

an external terminal provided on the land.

18. The semiconductor device as defined in claim 17, further comprising:

a second resin layer that avoids an upper portion of the external terminal but covers at least a lower portion of the external terminal.

19. The semiconductor device as defined in claim 1,

wherein the semiconductor substrate is a semiconductor chip.

20. The semiconductor device as defined in claim 1,

wherein the semiconductor substrate is a semiconductor wafer.

21. A circuit board on which is mounted the semiconductor device as defined in claim 1.

22. An electronic instrument comprising the semiconductor device as defined in claim 1.

23. A method of fabricating a semiconductor device, the method comprising:

forming a resin layer on a surface of a semiconductor substrate on which is formed an electrode that is connected electrically to an integrated circuit of the semiconductor substrate, avoiding the electrode; and

forming a wiring layer which is electrically connected to the electrode and has a land formed on the resin layer,

wherein a penetrating hole that exposes the resin layer is formed in the land.

24. The method of fabricating a semiconductor device as defined in claim 23, wherein the penetrating hole is formed simultaneously with the wiring layer.

25. The method of fabricating a semiconductor device as defined in claim 23, wherein a plurality of the penetrating holes are formed in the land.

26. The method of fabricating a semiconductor device as defined in claim 23, further comprising:

forming a resist layer on a surface of the semiconductor substrate on which the electrode is formed, the resist layer having an aperture that causes at least part of the land to be exposed.

27. The method of fabricating a semiconductor device as defined in claim 23,

further comprising:

forming an external terminal on the land.

28. The method of fabricating a semiconductor device as defined in claim 23, comprising:

forming a plurality of the resin layers at different positions in plan view on the semiconductor substrate;

providing a material of the wiring layer to cover at least the resin layer;

patterning a plated layer as a mask on the material of the wiring layer; and

forming the wiring layer and the penetrating hole by etching the material of the wiring layer and the plated layer in such a manner that portions of the material of the wiring layer covered by the plated layer remain.